



**ROTATOR** – complementary equipment to the CNC cutting machine

## Description



**Purpose of Equipment** - The Rotator is complementary equipment to the CNC cutting machine that allows cutting of any shape in steel pipes or fitting them with shaped ends. The equipment may be used both for the plasma and autogenous cutting technology. Cutting of pipes may use all the functions of the respective technology.

**Operating Principle** - The cutting of pipes uses the standard longitudinal movement of the portal on the rails as well as the variation of transverse movement of the cutting head to the rotation of the pipe. Once the function "Pipe cutting" is activated, the control system automatically adjusts the machine to this type of cutting operation.

**Individual Parts** - The equipment features a stationary part with the chuck and jaws for clamping the workpiece pipe, any number of rests and rails that serve to guide the rests to the desired positions.

**Programming** - The most suitable CAD/CAM system for programming the Rotator is any system that inherently contains preparation of 3D intersections and their subsequent conversion to 2D. Preparation of shapes can also use any 3D CAD system that allows converting the surface to 2D. The final converted shape uses the \*.DXF format for loading to the CAD/CAM system supplied with the machine.

## Basic Parameters



- minimum  $\varnothing$  of pipe workpiece – 50 mm
- maximum  $\varnothing$  of pipe workpiece – 400 mm

The maximum diameter is given by the size of the standard supply clamping jaws and by the area below the portal of the cutting machine. Modification of the two parameters allows cutting pipes of larger diameter.

- max. length of pipe workpiece – corresponding to the length of machine's rails

When cutting long pipes, consider their weight and/or deflection. Use the length to establish the number of rests. It is recommended to deploy 1 rest per 1.5 metres of pipe workpiece.

- maximum wall thickness of the pipe workpiece – depends on the capacity of the plasma source or by the capacity of the oxygen torch.

Cutting of pipes with thick walls transmits large quantities of heat to the material; this may affect the final parameters of the cut shapes or their positions in the pipe.

- maximum pipe weight – 100 kg per support

When handling heavy pipes, bear in mind that their weight must be distributed evenly to all supports along the pipe body.

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